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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,628	12/05/2003	Christopher J. Kralles	85918DAN	9084
7590 Mark G. Bocchetti Patent Legal Staff Eastman Kodak Company 343 State Street Rochester, NY 14650-2201		05/16/2007	EXAMINER TRAN, LY T	
			ART UNIT 2853	PAPER NUMBER
			MAIL DATE 05/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/728,628

Applicant(s)

KRALLS ET AL.

Examiner

Ly T. TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (USPN 5,764,263) in view of Kimura (US 2004/0189742)

With respect to claim 1, Lin discloses an apparatus and a method of providing information on a backside of photographic media comprising:

- Inserting photographic media into a photographic printer (Column 9: line 61-67)
- Printing an image onto a front side of the photographic media (fig.2: element 12, 14)
- Back printing information onto a backside of the media by positioning a print head in a printing position and directing ink from the print head onto a backside of the media print head is adapted to provide at least alphanumeric information on the backside of said media (Column 7: line 49-65, Fig.2: element 28, 29).

However, Lin fails to teach the movable ink jet print head which is movable between at least a printing position to a priming position where the print head is pressurized to force a stream of ink through discharge jets of the print head.

Kimura teaches the movable ink jet print head which is movable between at least a printing position to a priming position where the print head is pressurized to force a stream of ink through discharge jets of the print head (fig.3A-3D, abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to move the print head to the priming position as taught by Kimura. The motivation of doing so is to prevent the foreign particle contained in the ink.

2. Claims 1-3, 6-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (USPN 5,764,263) in view of Ishiguro (JP 09001827) and Cipolla (USPN 6,491,368).

With respect to claims 1-3, 6-24, Lin discloses an apparatus and a method of providing information on a backside of photographic media comprising:

- Inserting photographic media into a photographic printer (Column 9: line 61-67)
- Printing an image onto a front side of the photographic media (fig.2: element 12, 14)
- Back printing information onto a backside of the media by positioning a print head in a printing position and directing ink from the print head onto a backside of the media print head is adapted to provide at least

alphanumeric information on the backside of said media (Column 7: line 49-65, Fig.2: element 28, 29).

However, Lin fails to teach the movable ink jet print head which is movable between at least a printing position a priming position, an enclosure, wiper pad, ink tray, absorbent material, rotating/pivoting device.

Ishiguro teaches:

- The movable ink jet print head, which is movable between at least printing positions a priming position where the print head is pressurized to force a stream of ink through discharge jets of the print head. An enclosure (fig.1: element 8) having an opening positioned so as to face the discharge jets of said print head when said print head is in said priming position, said enclosure being adapted to catch the stream of ink that is forced through the discharge jets of the print head.
- A wiper pad (Fig.1: element 7) is positioned at an end of a wall of said enclosure, said wiper pad being adapted to wipe a discharge jet end of said print head (4) when said print head moves from said priming position to said printing position so as to remove excess ink from said print head (fig.8).
- Wiper pad is formed from a material which has little or no loose fibers ((fig.1)
- Print head (1) is provided on a rotary moving device (2) which is adapted to rotate the print head between said printing position and said priming

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position/print head is mounted on a pivoting device which is adapted to pivot said print head between said printing position and said priming position.

- Rotary moving device has a center of rotation (element 2) which causes the print head to translate away from media (3) as soon as rotary motion of said print head is initiated and pivoting device is adapted to cause the print head to translate away from the media as soon as a pivoting motion of said print head is initiated (fig.1)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide teach the movable ink jet print head which is movable between at least a printing position a priming position as taught by Ishiguro. The motivation of doing so is to reduce the size of ink jet printer.

Ishiguro discloses the claimed invention except that priming is done by using the suction on the nozzle instead of using positive pressure on the ink to force the ink. Cupola shows that using the suction on the nozzle and using positive pressure on the ink are an equivalent structure known in the art. Therefore, because using the suction on the nozzle and using positive pressure on the ink are art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute positive pressure for suction for the same purpose as withdraw some ink and any trapped air from the print head.

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3. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (USPN 5,764,263) in view of Ishiguro (JP 09001827) and Cupola (USPN 6,491,368).

As applied to claim 1 above, further in view of Watanabe (EP 435276).

The combination of Lin and Ishiguro fails to teach a removable ink tray, wherein said print head and said enclosure are mounted on said ink tray and said ink tray is movable between a non-operative position located partially outside of said printing apparatus and an operative position located within said printing apparatus and an absorbent is provided on a surface of said ink tray and within said enclosure.

Watanabe teaches: a removable ink tray, wherein said print head and said enclosure are mounted on said ink tray and said ink tray is movable between a non-operative position located partially outside of said printing apparatus and an operative position located within said printing apparatus (element 10, Abstract) and an absorbent material (fig.4: element 102) is provided on a surface of said ink tray and within said enclosure.

It would have been obvious to one having ordinary skill in the art at the time the invention was made as modify to provide a movable ink tray as taught by Watanabe et al. The motivation of doing so is to easily replaceable without the liability of introducing of the foreign matter or without the necessity for the high accuracy positioning, by which the stabilized and ensured recording operations are maintained with a simple structure and at a low cost.

Response to Arguments

4. Applicant's arguments filed 2/27/07 have been fully considered but they are not persuasive.

Applicant argues that Kimura does not teach pressurizing a print head to force ink therethrough. This argument is not persuasive because Kimura discloses pressurizing pressure control tank 6 to force ink through in pressure control tank to the head and out from the nozzle. The pressure is not directly applied to the head but through the tank to force the ink out. However, nothing in the claim recite that the pressure must apply directly to the print head.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155.

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The examiner can normally be reached on M-Th:6:30 AM-3:00PM or IFP, Friday: work at home.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LT

May 8, 2007



STEPHEN MEIER
SUPERVISORY PATENT EXAMINER